

Students, faculty react to DACA rescission with protest, outcry, disappointment, perseverance

Professors arrested in Harvard Square rally, admin offers legal aid to students, considers legal action

By Sharon Chao

Members of the MIT community took action against President Donald Trump's Sept. 5 repeal of the immigration program Deferred Action for Childhood Arrivals (DACA), which protected eligible illegal immigrant youth from deportation.

The MIT administration provided the students affected by the rescission with the opportunity to work with an immigration lawyer, Chancellor Cynthia Barnhart PhD '88 said in a call with *The Tech* Monday.

DACA is an Obama-era policy that allows some illegal immigrants who entered the United States as minors to receive a renewable two-year period of deferred action from deportation and a work permit. Trump repeatedly pledged to repeal DACA during his presidential campaign.

MIT President L. Rafael Reif ad-

vised against the repeal in an editorial in *The Boston Globe*, Aug. 31. "Repeal strikes me as a violation of deep American principles," Reif wrote. "They are undocumented through no fault of their own."

The Trump administration gave Congress six months to act before phasing out DACA, the repeal of which would affect nearly 800,000 young undocumented immigrants. Fifteen states, including Massachusetts, filed suit against Trump in federal court to block the repeal Sept. 6.

MIT Associate Professors Roger Levy and Tamar Schapiro were arrested at a Sept. 7 protest in Harvard Square denouncing the repeal.

"[The repeal] follows a pattern of scapegoating immigrants for problems that have much more complex causes," Schapiro said in a call with *The Tech*. "The administration is engaging in arbitrary, unsystematic,

and unprincipled detentions and deportations."

In a planned act of civil disobedience, the protesters formed a human chain across Massachusetts Avenue. Schapiro, Levy, and 29 other professors were arrested for blocking traffic.

"It is incumbent among those of us who are fortunate enough to receive benefits from our families, communities, and career opportunities to stand up for those of us who are not as fortunate. I see this action as a responsibility," Levy said in a call with *The Tech*.

Levy first heard about the protest from a colleague the day before. He contacted its organizer, Harvard Associate Professor Kirsten Weld, for more information before informing a faculty-organizing group he was

DACA, Page 4



NUR MUHAMMAD SHAFIULLAH—THE TECH

Masquerade parade participant at the 25th Cambridge Caribbean Festival which took place between Central Square and Kendall Square Sunday, Sept. 10.

Boston police shut down Phi Delt's party during holiday weekend

A party thrown by MIT fraternity Phi Delta Theta during Labor Day Weekend was shut down by Boston Police after detectives discovered underage drinking and overcrowding. The Sunday party, which came during rush week, included a waterfall flowing down the stairwell and spilling onto a marble staircase.

In a statement last week, police said the "first floor was being operated as a nightclub with low light, strobe lights, and entertainment provided by a DJ" without city approval. The fraternity president was issued a licensed premise violation

for occupancies well above the 39-resident limit and the presence of an underage guest with a can of Bud Lite. The waterfall was further deemed unsafe.

Fraternity rush is required to be dry, and houses are subject to daily alcohol inspections by other fraternities. A first offense prompts a warning, according to the Interfraternity Council (IFC) bylaws.

At the time of publication, it remained unclear whether the event had been registered, and IFC President Robert Binkowski declined to comment.

—By Drew Bent

Two shot non-fatally at annual Cambridge Caribbean Festival

Shooter quickly apprehended by police, carnival shut down

By Jessica Shi

Gunfire disrupted Sunday's 25th annual Cambridge Carnival International. The incident took place near 200 Technology Square, about 0.2 miles from the center of campus.

Two young men were shot, one in the leg and the other in the foot, according to *The Boston Globe*. Their injuries are believed to be non-life-threatening. Suspect Michael Coleman, 23, was apprehended at the scene and taken into custody by the Cambridge Police Department.

The carnival was shut down by police about an hour-and-a-half before its originally scheduled closing

because of the shooting, according to *The Cambridge Day*.

Students subscribed to MIT Alert, the Institute's emergency notification system, received a series of messages notifying them of the situation and providing updates in real-time.

The first of these messages, sent at 4:50 p.m., read, "Shooting reported at 200 Tech Square. Police responding. Stay clear of the area. If nearby, shelter indoors. More info to follow." Two subsequent messages informed students that police had taken the suspect into custody (sent at 5:05 p.m.) and that "no ongoing threat [was] believed to exist" (sent

at 5:31 p.m.).

A fourth and final "all clear" message was sent at 5:58 p.m.

The Cambridge Carnival International, also referred to as the Cambridge Caribbean Festival, is an annual celebration rooted in Afro-Caribbean traditions that typically draws thousands of attendees.

Violent confrontations have frequented the carnival in previous years as well, including three separate fights in Kendall Square and a 15-person fight in Central Square last year and another reported shooting in 2015, according to *The Cambridge Day*.

NASA astronaut shares ISS stories

Kate Rubins talks 3D printing, circular fire, and robotic arm movement with grade school students

By Meenakshi Sivapriya

NASA Astronaut and former Whitehead Institute Fellow Kathleen "Kate" Rubins met with local middle school and high school students Tuesday at the Whitehead Institute to share her experience aboard the International Space Station.

Rubins became the 60th woman to fly in space when she launched, aboard a Soyuz spacecraft, for a stay

from July 6 – Oct. 30 2016.

Public programs manager Amy Tremblay welcomed the students and faculty from 26 schools and 37 towns. Whitehead Institute member Terry Orr-Weaver talked about the interest Rubins showed in viruses and their behavior, describing her as "an incredibly bold visionary, who is fearless and determined to do important things"

"The journey started two and a

half years before we launched into the space station," Rubins said. The two phases of training she underwent included land survival, water survival, numerous simulations, and learning to fly a supersonic jet and to speak Russian. "When it is go time, the engines light up and all of a sudden we know this is for real, no longer a simulation, and we are blasting

NASA, Page 4

AMHERST ALLEY CLOSING

Due to ongoing New House construction, the west end of Amherst Alley is scheduled to close temporarily from Sept. 18 to Sept. 22. Although pedestrians can still use the street, vehicles including MIT shuttles will have to make a detour to Memorial Drive. The shuttle pick-up locations will be re-directed to the corner of Amherst Alley and Fowler Street.

IN SHORT

DormCon will meet Thursday, September 14 6 p.m. – 7:30 p.m. in New House. The meeting open to all undergraduates who live in dorms.

The last day to add half-term subjects offered in first half of term is Friday, September 15.

Apply to be a committee member of the Undergraduate Association by Friday, September 15 at 11:59 p.m.

Send news and tips to news@tech.mit.edu.

CASSINI'S END

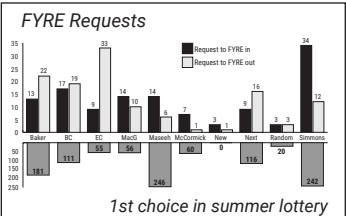
A requiem for the 20-year old Saturn space orbiter as it spirals to a fiery death. **SCIENCE, p. 7**

NEW COURSE 5 MINOR

In polymer and soft matter. **NEWS, p. 2**

NEW AI LAB

With unprecedented level of funding from IBM. **NEWS, p. 2**



FYRE RESULTS

McCormick popular its first year in FYRE; Maseeh and Simmons remain perennial favorites. **NEWS, p. 2**

JACOB COLLIER DOUBLE FEATURE

Reviews of the man and his music, and a movie about both. **ARTS, p. 6**

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The Tech (ISSN 0148-9607) is published on Thursdays during the academic year (except during MIT vacations) and monthly during the summer by The Tech, Room W20-483, 84 Massachusetts Avenue, Cambridge, Mass. 02139. Subscriptions are \$50.00 per year (third class). **POSTMASTER:** Please send all address changes to our mailing address: The Tech, P.O. Box 397029, Cambridge, Mass. 02139-7029. **TELEPHONE:** Editorial: (617) 253-1541. Business: (617) 258-8324. Facsimile: (617) 258-8226. *Advertising, subscription, and typesetting rates available.* Entire contents © **2017 The Tech.** Printed by Turley Publications, Inc.

Maseeh and Simmons see most new members in 2017 FYRE process

McCormick participates for first time, tops in-out ratios

By Zoe Anderson

Maseeh Hall and Simmons Hall were the most popular picks among the freshmen class this year, while the fewest number of freshmen chose to live in East Campus and Random Hall.

After moving into their temporary housing assignments, 11 percent of the Class of 2021 entered the First Year Residence Exchange (FYRE), which is comparable with participation statistics from the past three years. Fifty-nine percent of participants eventually moved, down from 71 percent last year.

Simmons had the most freshmen attempt to move in, while East Campus had the most attempt to leave. In order of FYRE-in to FYRE-out ratio, McCormick, New House, Simmons, Maseeh, and MacGregor, saw more residents attempt to move in than out. This was the first year that McCormick has participated in FYRE. Burton Conner, Baker, Next House, and East Campus saw the opposite trend, while Random Hall saw equal numbers try to enter and exit.

FYRE data was provided to

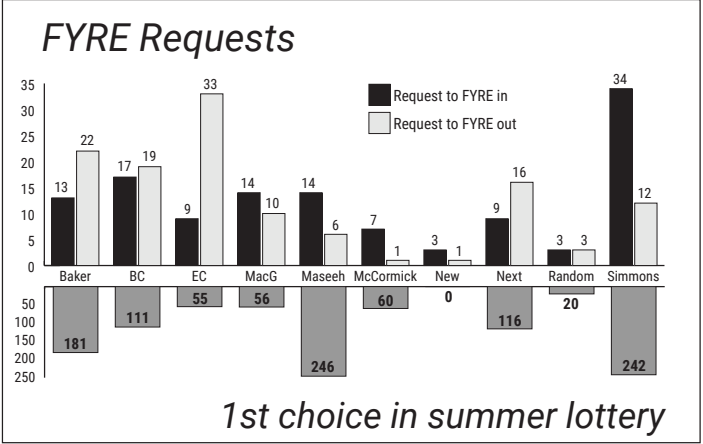
The Tech by the Division of Student Life. *The Tech* was unable to obtain a breakdown of how many people actually moved in and out by dorm.

“I’ve noticed that every year Maseeh is getting more popular among the incoming freshman,” Rob Bugliarelli '18, president of Maseeh, wrote in an email to *The Tech*. “I think a lot of it has to do with the ‘Maseeh has no culture’ stigma starting to fade away as we become more established in the MIT community.”

Jennifer Hapgood-White, associate director of housing assignments in the Division of Student Life, wrote in an email to *The Tech* that “the vast majority of students were matched with one of their top housing choices.”

Speaking about her decision to FYRE, Aba Kpeglo '21 said, “I just felt I should be happier in my dorm and I wasn’t as happy as I wanted in Next House. But other people are definitely happy in Next, so FYREing is a personal decision.”

Students were given opportunities to find a residence that best suited them through Residence Exchange (REX). “I’m super glad



COLLEEN MADLINGER—THE TECH

Requests to participate in FYRE and summer lottery data by dorm. Data provided by the Division of Student Life.

the residence heads and administration made sure to give a lot of opportunities to find a dorm that was a personality match to me,” said Adelynn Paik '21.

Paik said that REX, while “short enough so that it didn’t interfere with other orientation [programming],” was a helpful and useful process in determining where to call home for the year.

With the conversion of Senior House from undergradu-

ate to graduate housing, about 70 undergraduates accepted an incentivized offer to live in graduate housing to alleviate crowding in undergraduate dorms, Matthew Bauer, director of communications for the Division of Student Life, told *The Tech* in an email. Approximately 100 graduate students moved into what was formerly Senior House, which has a capacity of 133 students.

New minor in polymers and soft matter to be offered this semester

Minor to include ethics requirement, five students declared so far

By Ivory Zhu

A new minor in Polymers and Soft Matter (PPSM) will be offered starting this fall in response to “the increasing need for knowledge of chemistry in materials-related fields,” according to Professor Jeremiah Johnson, founder and current advisor of MPSM.

Polymers and soft matter, critical components of existing and next-generation materials, are ubiquitous – examples range from plastics to rubber, from DNA to our own bodies, from paper plates to a block of wood.

While MPSM is new to undergraduate students, the study of

polymers and soft matter is not new to the campus. The graduate Program in Polymers and Soft Matter (PPSM), an interdisciplinary program, which involves the Department of Materials Science and Engineering, the Department of Mechanical Engineering, the Department of Chemical Engineering, the Department of Biological Engineering, and the Department of Chemistry, has flourished at MIT since 1986, according to Johnson.

Only one week into MPSM’s existence, five students have already declared the minor. Johnson is satisfied with this number so far and expects it to grow further. According to Johnson, stu-

dents are expected to graduate from MPSM with “a deep understanding of the interdisciplinary nature of polymer science and engineering, solid skills to address challenges in these areas, and a broader perspective of how fields fit together in the real world.”

At the annual PPSM faculty meeting in spring 2015, Johnson first proposed the idea of extending the opportunity of study to undergraduate students. Afterwards, with careful course planning, proposal drafting, and help and support from Jennifer Donath from the Committee on Curricula; Darrell Irvine, the current Head of PPSM; and Bob Cohen,

the founder of PPSM in 1986, MPSM came into fruition.

Students pursuing the new minor are required to take four foundational subjects focusing on organic chemistry, polymer physics, and polymer engineering; a half-subject on ethical guidelines; and one elective or approved UROP experience. These classes, besides having to abide by the regulations for MIT minors, were selected because “their material either directly involves or could be readily applied to polymers.”

“I also included a required ethics course, simply because I

Minor, Page 8

IBM donates \$240 million for new joint artificial intelligence laboratory

Lab to facilitate creation of startups, focus on real-world applications in addition to development of theory

By Sandhya Kalavacherla

MIT will soon be home to a new artificial intelligence (AI) lab, partially funded by a \$240 million contribution over a 10-year period from IBM — one of the largest contributions from a private company to a university.

The Watson-branded artificial intelligence research lab hopes to make advances in artificial intelligence and its commercial applications, a field that is now considered to play a major role in future of computer science and society.

Anantha Chandrakasan, dean of the School Engineering at MIT, will serve as the co-chair of this lab along with Dario Gil, IBM

Research VP of AI. They plan to issue calls to MIT and IBM researchers soon.

AI has potential applications in a range of diverse fields, such as cancer biology and quantum computing. However, in terms of industry applications, the lab plans to direct the majority of its efforts on health care and cybersecurity.

In order to do so, the lab plans to collaborate with other departments at MIT, such as the Brain and Cognitive Sciences Department, the Institute for Data, Systems, and Society, and the Media Lab. For example, AI in conjunction with imaging and radiology holds promise in creating tools that can be trained to automatically detect cancer.

IBM’s press release announced that the new lab is grounded in four pillars: AI algorithms, AI industry applications and development, the physics of AI, and the economic and societal benefits of AI.

Although the central purpose of the lab is to focus on the conceptual development of AI, the lab also hopes to create more realistic and real-world applications, and to spark interest within the public.

Another major direction for the lab is facilitating the creation of startups and connecting with on-campus innovation centers, such as The Engine and the Deshpande Center for Technological Innovation, in hopes of create new jobs and opportunities for

those in the MIT community and the Boston area.

The intellectual property generated by MIT researchers can be licensed by IBM, while MIT faculty, students and postdocs will also have the opportunity to create startups based on the intellectual property.

Chandrakasan wrote in an email to *The Tech* that he is most excited about “bringing researchers from all five schools of MIT together to drive the next wave of AI.” He believes that “AI is on the cusp of revolutionizing a huge number of domains” and he hopes to “not only to advance the science of AI but also its application to make a positive impact on society.”

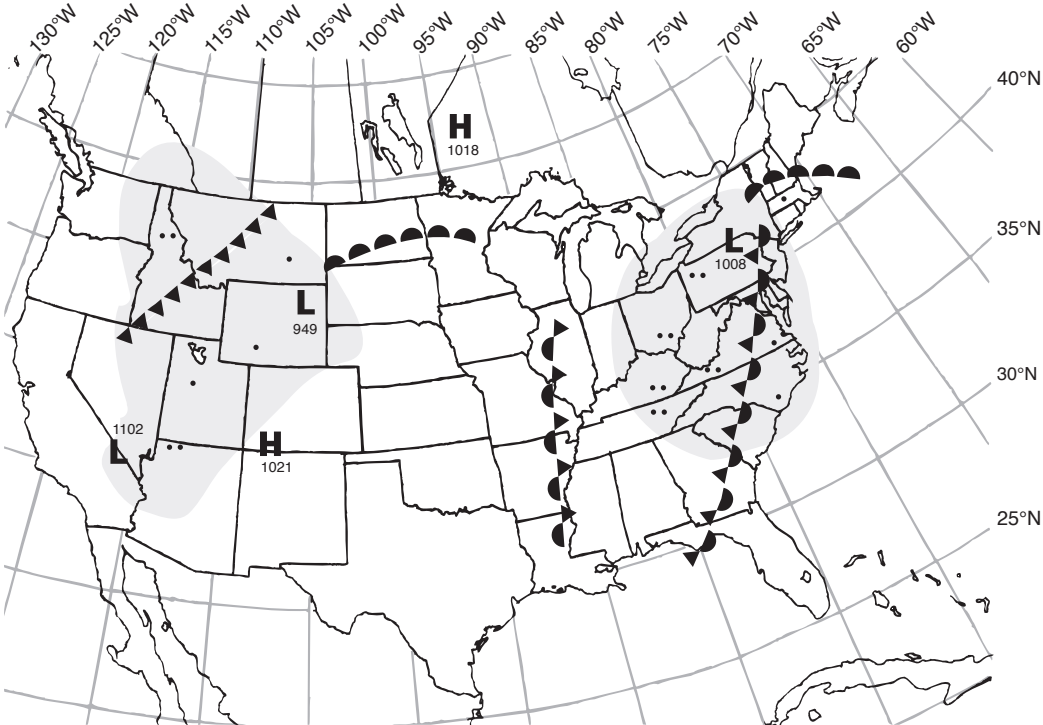
WEATHER

Irma leaves a trail of destruction across the Caribbean, Southeast

By **Jordan Benjamin**
STAFF METEOROLOGIST

Tranquil local weather will continue across the area as the late summer cool down slowly begins. The high temperatures in the mid-80s that Boston has experienced over the past several days will not abate much; high temperatures will cool into the 70s into next week and small amounts of rain may fall Friday as the remnants of Hurricane Irma’s moisture drift by the region. Irma made landfall in the Florida Keys and on the Florida Peninsula on Sunday, rapidly weakening as it moved northwards into Georgia and Alabama. The storm dissipated completely over the Southeast on Tuesday, ending its approximately two week journey that began in the eastern Atlantic.

The storm set numerous intensity records over its lifespan. Irma is the 2nd strongest recorded Atlantic hurricane by wind speed, and the strongest storm so far worldwide in 2017. The storm killed nearly 70 people and caused over 60 billion USD in damage. Its destruction extended well beyond the coasts; even hundreds of miles inland, over 1.5 million people lost power in Georgia as the storm wound down over the weekend. Thankfully, computer models currently do not show any significant new tropical threats over the next week or so; in the long term, there is a non-zero chance that Hurricane Jose may impact parts of the East Coast. At the moment however, that possibility appears quite unlikely.



Situation for Noon Eastern Time, Thursday, September 14, 2017

Weather Systems	Weather Fronts	Precipitation Symbols		Other Symbols
H High Pressure	- - - Trough	Snow	Rain	Fog
L Low Pressure	Warm Front	Shows		Thunderstorm
S Hurricane	Cold Front	Light		Haze
	Stationary Front	Moderate		Compiled by MIT Meteorology Staff and The Tech
		Heavy		

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DACA repeal hits MIT

Faculty group tries to improve civic engagement

DACA, from Page 1

part of, through which Schapiro was notified. The group was created by Professor Ceasar McDowell and Levy in Jan. 2017.

“It was called together as an acknowledgement of the unprecedented situation that we’re in, where we have a president who campaigned largely on the values of exclusivity, xenophobia, and racism, and misogyny,” Levy said. “The faculty group isn’t an official organization, but just a group of concerned faculty members who ask ourselves, ‘What can we collectively do to stand up for the values of justice, inclusivity, and respect for science as the pursuit of truth?’”

The faculty group met periodically during spring 2017 to brainstorm ways to improve civic engagement and plan effective actions to counter the uncertain social atmosphere. It helped plan the Day of Action, which took place April 18, 2016. Throughout that day, MIT community members hosted and attended lectures about current political, econom-

ic, and social challenges in an effort to start a collective dialogue.

“I’m disappointed that [DACA] had to end this way,” an MIT student formerly protected by DACA said in an interview with *The Tech*. “I’m more open about it than most people are. I share [my status] with my friends because I think it’s important to just talk about it. It gets the conversation going,” the student said.

The Latino Cultural Center (LCC) leadership expressed a similar sentiment. In an email to the LCC body, Vice President Jennifer Madiedo ’19 wrote, “We will FIGHT for everyone affected by this, because we are a familia, and we all deserve to be here.”

Since the announcement of the rescission, the MIT Office of General Counsel has provided affected students with free access to personal legal advice from immigration attorney Dan Berger. Berger offers guidance on renewal applications and answers other questions.

Affected students also have a designated point of contact within the administration: Assis-

tant Dean and Co-Director of Student Support Services Gerardo Garcia-Rios.

Within the larger MIT community, Barnhart had previously established the Working Group on Potential Post-Election Changes to Federal Law and Policy, chaired by Professor Christopher Capozzola, in December 2017. The working group consists of faculty, students, and staff who inform the administration about possible changes to federal law that could impact campus climate and student experience. It sponsored a community briefing on immigration laws and policies earlier this spring.

“Every student, whether they are documented or undocumented, should be able to thrive here at MIT,” Barnhart said.

MIT is considering filing an amicus brief in support of the legal challenge to the DACA repeal. MIT police do not inquire about an individual’s immigration status, and the Institute still has the ability to admit and enroll undocumented students.

Astronaut shares her story

Grew heart cells in space, ‘got lost’ in huge ISS

NASA, from Page 1

off to outer space,” she added.

The members of the Expedition 48 and Expedition 49 orbited the Earth for two days before docking at the International Space Station. “The space station is the size of a football field. I actually got lost and went the wrong way the first time I came into the module,” Rubins said.

Rubins served as a flight engineer, and in addition to biological research, she spent 12 hours and 46 minutes doing Extra Vehicular Activity (EVA), or spacewalks. The team captured an incoming SpaceX spacecraft using the robotic arm which provided them with the international docking adapter that enabled EVA.

“We trained for hours and hours in the pool but this was the first time we were doing this, floating above the planet. It’s very hard to work in space — it’s a lot of wires and electrical connectors and doing it all with these pairs of oven mitts!” she added.

The astronauts also managed

to attach cameras to the space station using the robotic arm, allowing them to take pictures for scientific imagery. They conducted over 275 experiments onboard, with Rubins taking part in almost 100 of those.

The most fascinating experiment, in Rubins’ opinion, was growing heart cells in space and observing differences in the beating due to microgravity.

Rubins was the first person to sequence DNA in space. “This allows us to get answers in real time. We wouldn’t have to wait to send that experiment back through space,” she said. During their time there, they developed molecular biology tools using technology like 3D printing.

“We have to pay attention where the fluids go. Fluids behave differently because surface tension takes over as a very strong variable,” Rubins said.

One of the most interesting things she worked on, Rubins mentioned, was the Combustion Rack, which allowed astronauts to burn things in a controlled way.

“Flames behave differently [in space] too. They are circular,” she added.

What was it like to navigate in microgravity? “At first you’re really disoriented, and you don’t know which way is up and which way is down. All the fluid shoots up to your head, and something’s not right. Your body adapts to it after about 2 weeks,” she told *The Tech* in an interview after the talk.

“When the day we had to leave came, I was really sad. I loved the space station as my home. I loved to work in space,” Rubins said.

To re-enter the Earth, they had to “burn out the engine, and all that energy turns into plasma that surrounds the spacecraft and come as a meteor hitting the earth. Then we open the parachute that stabilises us.”

Rubins told *The Tech* that walking after being for so long in space caused her to have the “gait of a 2-year old.” “You want to think very carefully about how to walk. It took 2 months and a lot of gym to walk normal again.”



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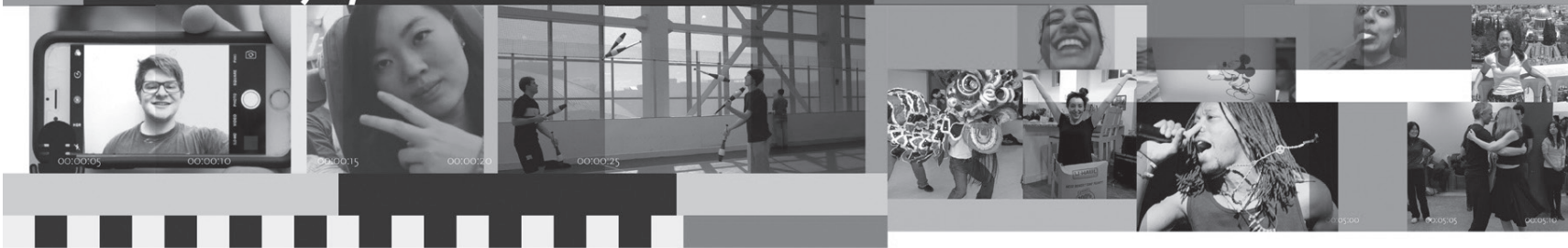


NUR MUHAMMAD SHAFIULLAH - THE TECH—THE TECH
NASA astronaut and former Whitehead Institute Fellow Kate Rubins met with local students at the Whitehead Institute on Sept. 12th.

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Video contest for MIT Students!

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Create a video and show the world what you do outside of the classroom.
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Division of Student Life

Jacob Collier performs at Isabella Stewart Gardner Museum

L. BARRY HETHERINGTON—THE TECH

```
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import new_skills █

def learnMarketableJobSkills():
    return linux, OSX, javascript, applescript, perl, python

if you.interest == True:
    print "E-mail join@tech.mit.edu"

----:----F1 joinTechno.py      (Python)--L1--Top-----
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SCIENCE

This Friday, the Cassini space orbiter will finish its 20-year-long mission by making a “death dive” into Saturn’s atmosphere, where heat and pressure will cause it to disintegrate. During its final minutes, the spacecraft will send data back to Earth in real-time eking out as much precious data from the mission as it possibly can — for who knows when humanity will have an opportunity like this again?

From orbit, Cassini has provided researchers with such a

After all of its contributions to our understanding of Saturn and the outer solar system, Cassini has been on a doomed trajectory since April. That's when NASA guided Cassini into an or-



One of Cassini's last looks at Saturn and its main rings from a distance. [www](#)

bital path that took it, for the first time ever, between Saturn and its rings. Cassini has made 20 of these sub-ring orbits, using the last five to dip so close to Saturn that it could directly measure the planet's atmosphere. And it's this path that set Cassini on an inevitable course for vaporization.

The last hours of Cassini's

mission could provide valuable data to answer some of researchers' most persistent questions: How was Saturn formed, does it have a solid core, and how long is a Saturnian day?

One might also wonder why NASA is throwing its \$2 billion spacecraft into a “death dive” instead of trying to land it or re-

cover it. The answer lies in planetary protection — or, in this case, moon protection. If it's possible that moons like Titan and Enceladus might currently, or could one day, harbor life, then humanity has a responsibility to leave such landscapes uncontaminated.

Solution to Multitasker

from page 9

L	O	G	O	B	A	T	S	A	R	O	M	A					
I	R	A	N	A	L	O	E	D	I	V	A	N					
M	A	L	L	R	A	G	E	A	V	E	R	T					
P	L	A	Y	E	R	M	A	N	A	G	E	R	S				
				L	E	O		M	E	R							
A	F	G	H	A	N		S	R	I		S	E	W				
C	L	E	A	T		A	W	A	S	H		V	I	A			
H	U	N	T	E	R	G	A	T	H	E	R	E	R	S			
O	N	O		D	I	E	T	S		L	A	N	E	S			
O	K	A	Y		D	D	S		S	E	N	T	R	Y			
				A	W	E			H	U	N						
				O	W	N	E	R	O	P	E	R	A	T	O	R	S
S	P	I	K	E		L	E	A	F		E	V	I	L			
P	A	L	E	D		E	A	V	E		N	A	P	A			
A	L	L	E	Y		S	L	E	D		S	L	E	W			

Solution to Four

from page 11

S	A	F	E	S		B	O	A	S		P	B	S						
T	H	O	R	N		I	S	N	T		O	U	T	S					
L	A	R	G	O		G	L	E	E		L	Y	R	E					
						W	O	O	D	R	O	W		W	I	L	S	O	N
A	B	A		P	E	I			A	N	O	I	N	T					
W	A	R	R	E	N	G	H	A	R	D	I	N	G						
E	L	D	E	R	S		A	N	T										
D	I	S	C	S			I	V	Y		T	H	E	M	E				
							M	A	O		H	E	A	L	P				
						C	A	L	V	I	N	C	O	O	L	I	D	G	E
A	R	T	I	E	R				T	H	E			O	S	E			
H	E	R	B	E	R	T	H	O	O	V	E	R							
E	W	E	R			O	R	E	O		I	V	A	N	A				
M	E	S	A			R	I	A	L		S	E	D	E	R				
	L	T	S			S	O	R	E		E	R	O	D	E				

Solution to Drinking

from page 10

3	1	2	4	8	7	6	5	9
5	3	4	6	1	9	8	7	2
4	2	3	5	9	8	7	6	1
1	8	9	2	6	5	4	3	7
8	6	7	9	4	3	2	1	5
6	4	5	7	2	1	9	8	3
7	5	6	8	3	2	1	9	4
2	9	1	3	7	6	5	4	8
9	7	8	1	5	4	3	2	6

Solution to Second

from page 9

8	9	5	6	3	7	1	2	4
2	4	6	1	5	9	7	3	8
7	3	1	8	2	4	5	9	6
6	5	7	9	1	3	4	8	2
1	2	9	4	6	8	3	5	7
3	8	4	2	7	5	6	1	9
9	6	8	5	4	1	2	7	3
5	7	2	3	8	6	9	4	1
4	1	3	7	9	2	8	6	5

Solution to Pset Nights

from page 9

5	3	9	1	2	8	6	7	4
2	1	4	7	9	6	3	5	8
7	6	8	3	4	5	1	2	9
9	8	7	2	6	3			

splash

The first Legal Sea Foods restaurant opened in 1968. It was a small no-frills place where you paid before you ate, and the food was served on paper plates. It was a simple formula – offer only the highest quality, freshest seafood with fast and friendly service. Legal Fish Bowl is a modern interpretation of this heritage. Because five decades later, it's still all about the fish.

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New minor to span five depts.

Topic is ‘at the front end of a range of several fields’

Minor, from Page 2

believe that all students should be trained in ethical practices,” Johnson wrote in an email to The Tech.

Johnson also recognized the drive for innovation in the field of polymers and soft matter. “This topic is at the front edge of a range of several fields, which is why PPSM is so successful and why all five departments endorsed MPSM,” Johnson wrote, “We need even better polymers to enable new applications such as precision drug delivery sys-

tems, materials that can spontaneously heal, additive manufacturing with recyclable yet robust materials, energy conversion with flexible solar panels. We also need new ways to make polymers that do not rely on petroleum feedstocks. The future is extremely exciting.”

MPSM, spanning five departments, indicates the Department of Chemistry’s dedication to interdisciplinary education. “Matter is made of chemicals, and cutting edge research in nearly every department at MIT requires some knowledge of the

properties of chemicals,” Johnson wrote. In his own research, he always collaborates with people from other departments. For example, chemists can help engineers build new devices by making new molecules.

Johnson is confident that prosperous career paths await MPSM students: “I cannot tell you how many companies have expressed interest in hiring MIT students with knowledge at the interface of synthetic chemistry and polymer science. Students of this minor will have numerous job opportunities!”

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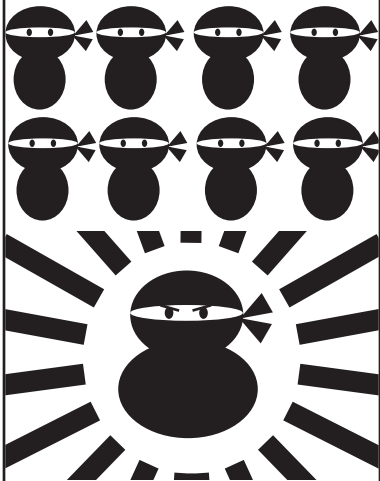
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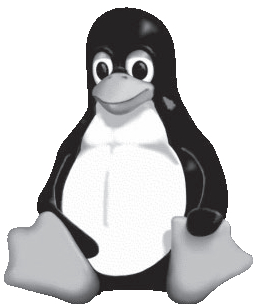
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Second Week of Classes

Solution, page 7

8		5		3		1		
	4	6	1				3	
				2	4	5		
							8	2
1		9				3		7
3	8							
		8	5	4				
	7				6	9	4	
		3		9		8		5

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Pset Nights

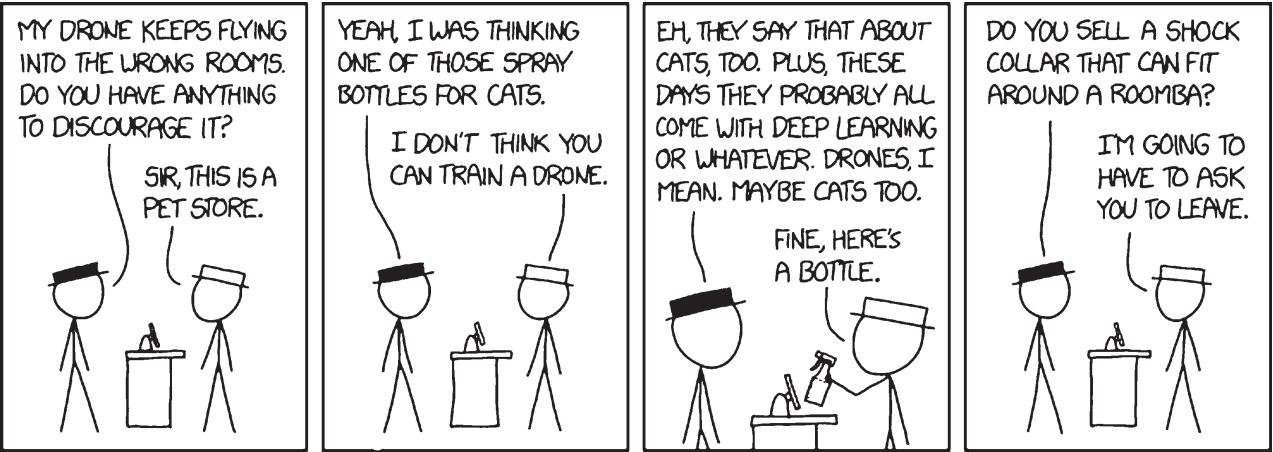
Solution, page 7

	3			2		6	7	4
2								
7	6	8			5		2	
			2					5
	2		9		4		3	
4					1			
	4		6			2	9	3
								6
8	9	6		3			4	

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.



[1881] Drone Training



The joke will be on him in a few weeks when animal control shows up and takes custody of his Roomba.

Multitaskers

Solution, page 7

ACROSS

- 1 Letterhead illustration
- 5 Flying mammals
- 9 Fragrance
- 14 Teheran's country
- 15 ___ vera (natural soother)
- 16 Backless sofa
- 17 Suburban shopping center
- 18 Lose one's temper
- 19 Keep from happening
- 20 Two-job baseballers
- 23 Summer zodiac sign
- 24 Sea: Fr.
- 25 Knitted blanket
- 29 ___ Lanka
- 31 Works with needle and thread
- 35 Golf-shoe gripper
- 36 Overflowing (in)
- 38 By way of
- 39 Stone Age foragers for food
- 42 Yoko ___
- 43 Tries to slim down

- 44 Freeway divisions
- 45 Approve of
- 47 Orthodontist's deg.
- 48 "Who goes there?" asker
- 49 Leave speechless
- 51 Follower of Attila
- 52 Self-employed truckers
- 60 Railroad nail
- 61 Book sheet
- 62 Wicked
- 63 Was drained of color
- 64 Roof overhang
- 65 California wine valley
- 66 Bowling area
- 67 Snow vehicle
- 68 Whole bunch

DOWN

- 1 No longer fresh, as lettuce
- 2 Face-to-face exam
- 3 Lavish party
- 4 Merely
- 5 Devoid of vegetation
- 6 San Antonio landmark

- 7 Julius Caesar garment
- 8 Looked at
- 9 Maxim
- 10 Potomac and Nile
- 11 Higher than
- 12 Fourth planet
- 13 Pantry invader
- 21 On cloud nine
- 22 Pennsylvania sect
- 25 Sneeze sound
- 26 Get an F in a class
- 27 Port of Italy
- 28 Fedora, for instance
- 29 Sharp blows
- 30 Lab-maze runners
- 32 Major happening
- 33 Cable installer, at times
- 34 Fresh-mouthed
- 36 Matured
- 37 Montana's capital
- 40 Passenger
- 41 Sought office
- 46 Civil War soldier
- 48 Used a Web browser

1	2	3	4		5	6	7	8		9	10	11	12	13
14					15					16				
17					18					19				
20				21					22					
				23				24						
25	26	27	28				29	30		31	32	33	34	
35					36				37		38			
39					40					41				
42				43					44					
45			46		47				48					
			49	50				51						
	52	53				54	55			56	57	58	59	
60						61				62				
63						64				65				
66						67				68				

- 50 Overgrown with dandelions
- 51 Throw with force
- 52 Whitish gemstone
- 53 Self-control
- 54 Soccer stadium shouts
- 55 Church bell sound
- 56 Bills picturing Hamilton
- 57 Roundish shape
- 58 Ready to harvest
- 59 Picnic side dish
- 60 Healthful resort

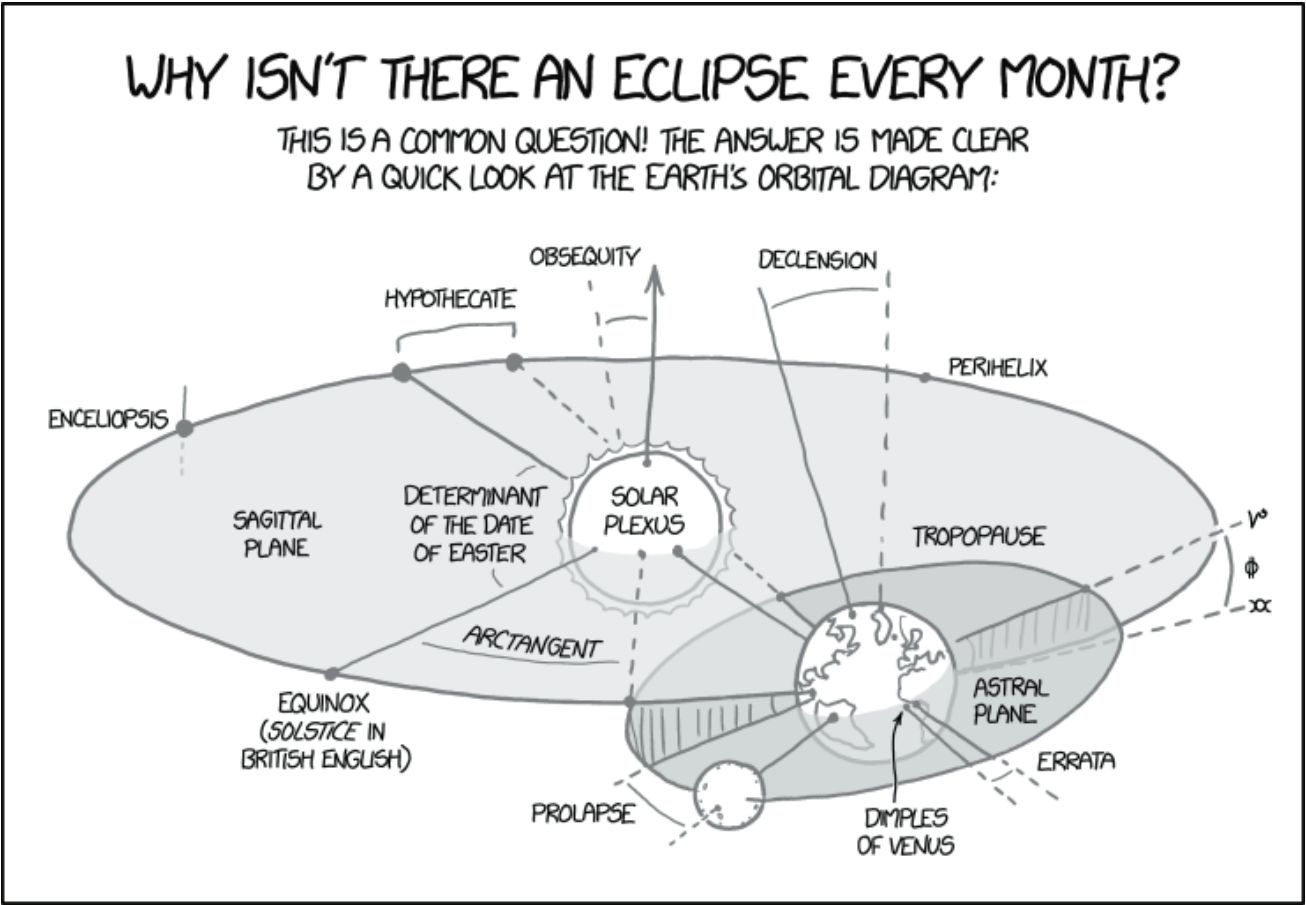
Drinking from a Firehose

Solution, page 7

45x		16+		1-		270x	
				26+		5-	
192x			45x			11+	6x
	23+		18x	1-			105x
		18+		12x		2	
168x			112x			30+	
	45x			6x			32x
18x		168x			360x	2-	
	7		1	5			6

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1-9. Follow the mathematical operations for each box.

[1878] Earth Orbital Diagram

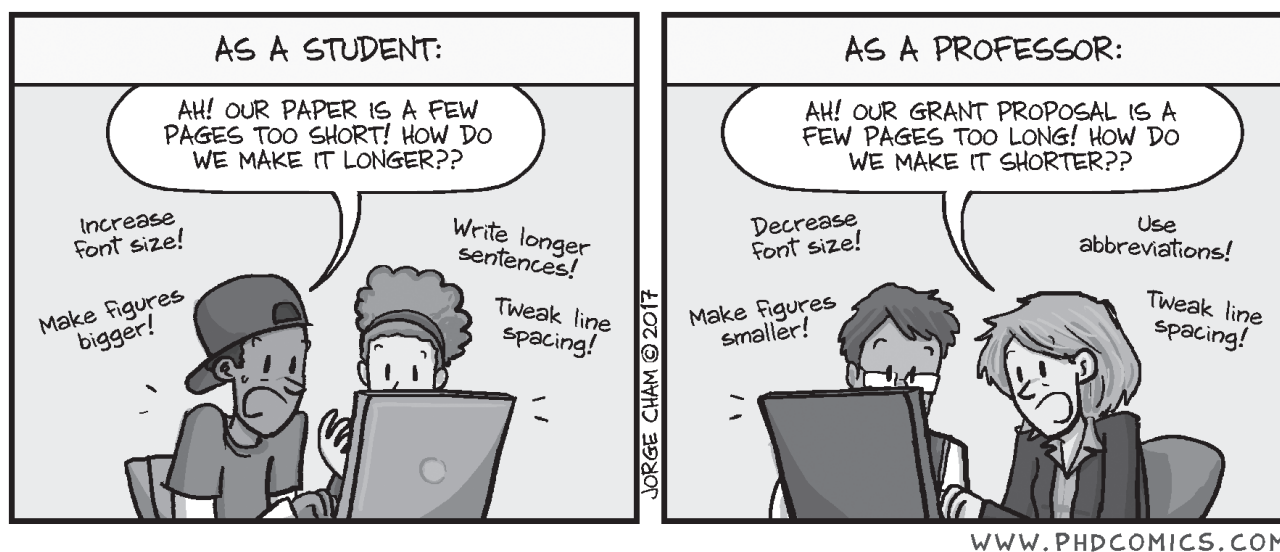


You shouldn't look directly at a partial eclipse because of the damage that can be caused by improperly aligning the solar-lunar orbital plane with the orbital bones around your eye.

Goddard's Lost Intern by SOYO



PAGE LIMITS



Four in a Row by Mark McClain

Solution, page 7

ACROSS

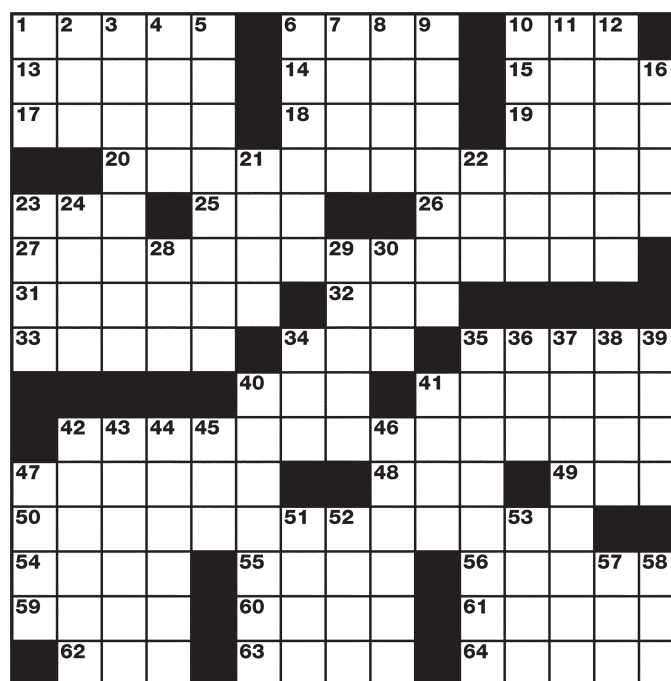
- 1 "Combination" items
- 6 Tropical reptiles
- 10 Nature network
- 13 Hiker's annoyance
- 14 Fails to be
- 15 Scoreboard data
- 17 One of the Keys
- 18 Sheer delight
- 19 Ancient instrument
- 20 First of four
- 23 It has a How Courts Work
web page
- 25 Medal of Freedom architect
- 26 Choose formally
- 27 Second of four
- 31 Village VIPs
- 32 Woodpecker's prey
- 33 Checkers, for instance
- 34 Creeping greenery
- 35 Melodic subject
- 40 Chiang foe
- 41 Mend
- 42 Third of four
- 47 More stylized

- 48 Las, los, or les
49 It means "full of"
50 Last of four
54 Vase-shaped pitcher
55 Snack in a new Firework
flavor
56 Jared's mother-in-law
59 Scottsdale neighbor
60 Omani currency
61 Exodus commemoration
62 Some LAPD officers
63 Ticked off
64 Undermine, in a way

DOWN

- 1 NL Central team
2 "I know that!"
3 Sends on
4 Hence
5 Private detectives
6 Truck-stop stopper
7 Ibsen Museum city
8 All over
9 Knighted rock star or sci-fi
star

- 10 Hoi ____
 11 Joins, as an exclusive club
 12 Herculean
 16 Email category
 21 Ursine abodes
 22 Where E. Chicago is
 23 Far from blasé
 24 With 36 Down, South
 Pacific song
 28 For fun, for short
 29 Chaos
 30 Even minimal
 34 Name on the cover of
 Thunderball
 35 Air
 36 See 24 Down
 37 Raleigh's vain quest
 38 Alehouse array
 39 Three-sided weapon
 40 Imitates exactly
 41 Sounds of merriment
 42 Embroidery craft
 43 On a break
 44 Lovers of harmony, it's said
 45 First of vowels

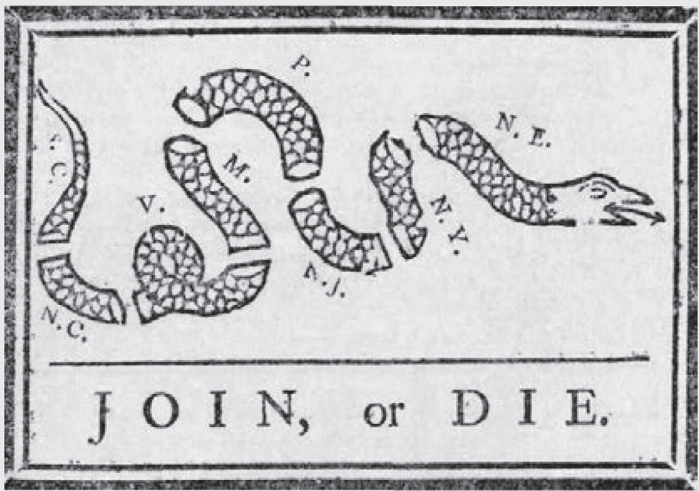


- | | |
|--|---------------------------|
| 46 Tutor portrayer in The Last Emperor | 52 Pick up with your head |
| 47 "You forgot about me . . ." | 53 At all times |
| 51 Chamber work | 57 The Simpsons neighbor |
| | 58 Consist of |

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